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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,625	11/24/2003	Ki Chul Cha	0465-1077P	1292
2292	7590	08/09/2007		
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER PATEL, RITA RAMESH	
			ART UNIT 1746	PAPER NUMBER
			NOTIFICATION DATE 08/09/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/718,625

Applicant(s)

CHA ET AL.

Examiner

Rita R. Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2007.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,14,15 and 20-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,14,15 and 20-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Applicant's Arguments / Amendments

This Office Action is responsive to the amendment filed on 5/4/07. Claims 1, 4, 14, 15, and 20-25 are pending. Claims 1, 3, 14, and 15 have been amended. Claims 20-25 have been added. Claims 4-13 and 16-19 have been withdrawn and hereby cancelled.

In view of Applicant's claim amendments, the former 35 USC 102 rejection has been overcome. However, upon further consideration, the instant claims are rejected under new grounds of rejections and thus, claims 1, 4, 14, 15, and 20-25 are finally rejected for the reasons of record.

Applicant's arguments/remarks filed on 5/4/07 directed towards the former 35 USC 102 rejection is now considered moot because the rejection has been overcome. Applicant's arguments/remarks directed towards the new claim limitations will be discussed in the rejection herein.

Election/Restrictions

As indicated supra, with regard to the response by Applicant filed on 5/4/07, Applicant has cancelled claims 4-13 and 16-19.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 14, 15, and 20-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Crisp, III herein referred to as "Crisp" (US Patent No. 6,799,085) as ² and further in view of Dosch (US Patent No. 3,148,687). ₂

Crisp discloses an appliance supply distribution and dispensing system whereby a computerized system monitors the supply level(s) and, when necessary, automatically orders and delivers additional supplies (Abstract; col. 1, lines 52-67; col. 2, lines 1-13). Furthermore, Crisp teaches an order processing system(s) 14 (controlling part), an appliance computer/supply dispensing computer (memory part), and a user interface panel or terminal 34 (input part) which is preferably a conventional touch screen adapted to display a plurality of interfaces. Computers (memory part of Crisp) are well-known in the art to hold data and numerical values, such as look-up tables, as part of their memory. Alternatively, other user interfaces such as selections, buttons, lights, indicators, or other suitable mechanical or electronic devices (knob) may be used in conjunction with the present invention. The user panel (display part) is adapted to display a plurality of interfaces to the user as illustrated in Figures 4A through 4J. The user can use the interface or interface panel 34 or other devices (knob) to cause the appliance to use a supply or product; one of ordinary skill in the art at the time of the

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invention would at once envisage the apparatus of Crisp performing functionally responsive to supply mechanisms via a knob, specifically for the purpose of integration of water softening supplies. Crisp acknowledges the requirement for supplying additives to said dishwashing machines and controlling the hardness level of the water in such a machine is known in the art; hard water is known to clog pipes and to complicate soap and detergent dissolving in water, therefore utilizing the controlled dispensing system of Crisp aids in overcoming common issues formed by hard water. Regarding the recitation of a knob that increases hardness value of the washing water when the knob is turned to the right, this recitation is a statement of intended use which does not patentably distinguish over Crisp since Crisp meets all the structural elements of the claim(s) and is capable of having a knob turned to increase/decrease hardness value when turned right/left if so desired. See MPEP 2114. Water softening by the addition of a water softening agent, for example salt water, is a known water softening technique and is capable of being performed by the apparatus of Crisp because the machine of Crisp provides controlled distribution for said dishwashing machine.

Although Crisp teaches water softening as a known controlling means in dishwashers, Crisp fails to teach an ion exchange resin for dropping hardness in water softening. However, Dosch teaches a domestic home article washing machine including a water softening arrangement which uses ion exchange resins. In fact, Dosch teaches that ion exchange resins are used almost exclusively for domestic water softeners and regeneration water supply (col. 1, lines 24-25 and 38-40). It would have been obvious to one of ordinary skill in the art at the time of the invention to use ion

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exchange resins in the domestic dishwashing apparatus of Crisp, as taught by Dosch to be a known material used for performing water softening in domestic washing machines. The use of conventional materials to perform their known functions in a conventional process is obvious. *In re Raner* 134 USPQ 343 (CCPA 1962).

Using computer control to perform well-known cleaning/washing functions is known in the art, as supported by Crisp. The combination of Crisp and Dosch teaches the use of computer control in domestic washing machines to control said known cleaning/washing functions, such as water softening and more specifically, the use of ion exchange resins in water softening.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of


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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rita R. Patel whose telephone number is (571) 272-8701. The examiner can normally be reached on M-F: 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



rrp

MICHAEL KORNAKOV
PRIMARY EXAMINER

